


dpr
Outline

- Introduction
- Monitoring Objectives
- Sampling Sites
- Sampling Methods
- Results and Conclusions

dpr
Introduction

- Department of Pesticide Regulation
- Independent monitoring
- Consultation
- Environmental data
- Urban environment



dpr
Monitoring Objectives

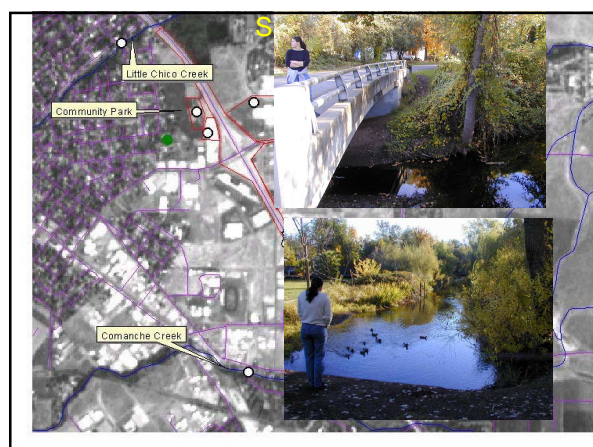
Obtain data on environmental concentration of Carbaryl to ensure

- human safety
- ecological safety
- proper application

dpr
Sampling Sites

Selection Criteria

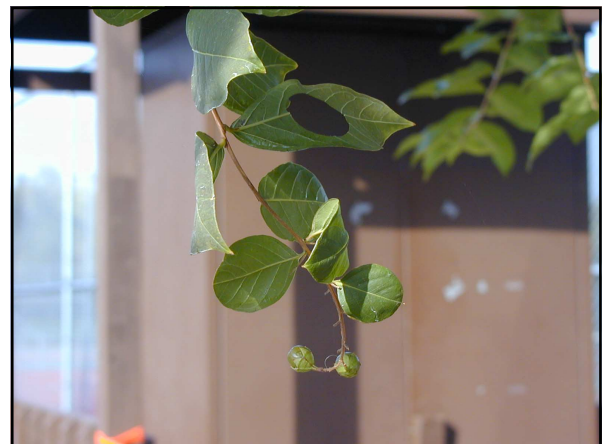
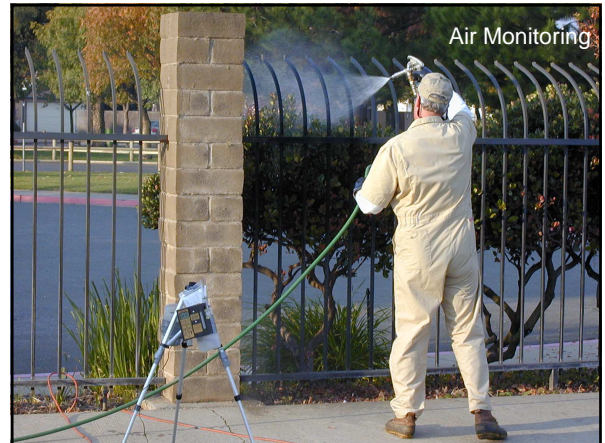
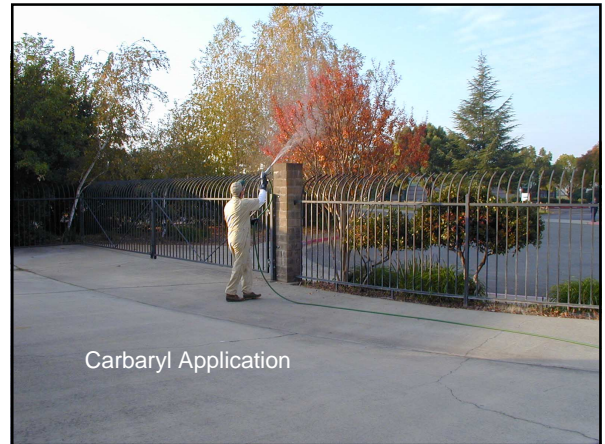
- Sensitive areas
 - human & ecological
- Worst-case monitoring
 - proximity to application
 - highest amount used
 - Highest frequency





Environmental Media

- Tank Mixture
- Air
- Surface Water
- Ground Water
- Foliage
- Fruits and Vegetables
- Fish





Results: Tank Mixture

Location	Date Sampled	Concentration %
Whitman Ave	11/5/00	0.142
Chico Mall	"	0.151

Label rate ranged 0.05 to 0.20%



Results: Air

- Whitman Ave
- Four Intervals
 - 1 hour before
 - Duration of application plus 1 hour
 - 24 hours after
 - Another 24 hours
- No residue detected
- Health level 3,057 ppt



Results: Foliar

Location	Date Sampled	Concentration (ug/cm ²)
Community Park	11/5/00	2.14
Chico Mall	11/5/00	3.79

Safe levels: 5.6 ug/cm²



Results: Surface Water

- Sites
 - Little Chico Creek
 - Comanche Creek
- Sampling dates
 - Prespray November 4,
 - Postspray November 5,
 - First Rain Event November 13
- No Carbaryl detected

Minimum Detection Level 0.05 ppb

Acknowledgments

Consultants

CDFG, NMFS, RWQCB, Co.Dept. of Ag.
CDFA

Collaborators

Property Owners, Applicators

Center for Analytical Chemistry

C Cooper, J Hsu, J White, J Hernandez,
H Feng, P Lee, D Tran

DPR Field Staff

Dave Kim, Dee Jones, Nina Bacey